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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,898	03/22/2001	Mitsuru Sato	041514-5114	4674

9629 7590 12/10/2003

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EXAMINER

AGUSTIN, PETER VINCENT

ART UNIT	PAPER NUMBER
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2652

DATE MAILED: 12/10/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/813,898

Applicant(s)

SATO ET AL.

Examiner

Peter Vincent M Agustin

Art Unit

2652

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 & 2 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 and 2 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 22 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on ____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 6.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: .

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Takamine.

Figure 4, items 1-5, 8-12 and 19 disclose "optical system", items 14, 17, 18 and 22-24 disclose "tracking error signal generating portion", items 21 and 29, column 13, lines 14-18 and column 16, lines 13-45 disclose "spherical aberration detecting portion", figure 4, items 30 and 31 disclose "level correcting portion", and items 25 and 26 disclose "driving portion". Applicant should note that the measured optical axis deviation is proportional to the "spherical aberration occurring in the optical system" as a result of the deviation, which deviation is corrected by the "level correcting portion" of Takamine.

3. Claims 1 and 2 are rejected under 35 U.S.C. 102(b) as being anticipated by Takeya et al.

Figure 1, item 22 discloses "^{optical}~~operating~~ system" of claim 1. Items 31-36 disclose "tracking error signal generating portion" of claim 1. Figure 11 discloses "spherical aberration detecting portion" (claim 1) which produces result "indicative of an error of a thickness" (claim 2). Applicant should note that different thicknesses inherently produce different aberration for a given optical system; hence, detection of thickness inherently is detection of aberration amount. Figure 1, items 32 and 34 disclose "level correcting

portion" of claim 1. Item 37 discloses "driving portion" of claim 1. Item 38 discloses "gain control signal generating portion" of claim 2. Items 32 and 34 disclose "amplifying portion" of claim 2.

Conclusion

4. The following prior art made of record and not relied upon are considered pertinent to applicant's disclosure.

Miyamoto et al. discloses a technique of forming a tracking offset signal based on the amplitude difference, which technique minimizes the tracking offset caused by aberration in the optical system.

Tsuchiya et al. discloses an apparatus for discriminating optical recording media of different thicknesses from each other and thickness is determined by detecting the presence of aberrations via a tracking error signal.

Nakayama et al. discloses measuring a non point aberration using an RF signal and correcting an offset in a tracking error signal.

Nagata et al. discloses tracking adjustment using the sum of the maximum and minimum tracking error signals or the mean value of the sum.


Furukawa discloses an optical information reproduction apparatus capable of improving the information reading accuracy by correcting spherical aberration caused by thickness error.

5. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa T Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



W. R. YOUNG
PRIMARY EXAMINER